CLAIMS

1. A lithographic printing plate precursor comprising:

a substrate; and

a lipophilic layer deposited on the substrate,

wherein said lipophilic layer comprises a cross-linked product obtained by cross-linking a polymer having a thermally decomposable group on a main chain with a cross-linker.

2. The lithographic printing plate precursor according to Claim 1, wherein said thermally decomposable group is an azo group.

3. The lithographic printing plate precursor according to Claim 1, wherein said polymer has a functional group that is reactive to the cross-linker.

4. The lithographic printing plate precursor according to Claim 1, wherein said substrate has a hydrophilic surface.

5. The lithographic printing plate precursor according to Claim 1, wherein said lipophilic layer contains a photo-thermal conversion agent.

6. The lithographic printing plate precursor according to Claim 1, wherein a hydrophilic layer is provided between said substrate and said lipophilic layer.

7. The lithographic printing plate precursor according to Claim 6, wherein said hydrophilic layer contains a photo-thermal conversion agent.

8. A preparation method for a printing plate wherein the lithographic printing plate precursor according to any one of Claims 1 to 7 is exposed to an infrared laser beam to remove the lipophilic layer in the exposed area.